



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,418	05/30/2001	Michael K. Blackwell	CKB-001.02	8017

25181 7590 02/23/2006

FOLEY HOAG, LLP  
PATENT GROUP, WORLD TRADE CENTER WEST  
155 SEAPORT BLVD  
BOSTON, MA 02110

EXAMINER

SHECHTMAN, SEAN P

ART UNIT PAPER NUMBER

2125

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/870,418

Applicant(s)

BLACKWELL ET AL.

Examiner

Sean P. Shechtman

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 5, 6, 8, 11-13, 17-20, 30, 33, 36, 37, 42, 45-50, 54, 55, 57, 60 and 61 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 6, 8, 11-13, 17-20, 30, 33, 36, 37, 42, 45-50, 54, 55, 57, 60 and 61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 April 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/7/05; 8/11/05</u> . | 6) <input checked="" type="checkbox"/> Other: <u>IDS filed 1/9/06</u> .                 |

Continuation of Disposition of Claims: Claims withdrawn from consideration are 4,9,10,14-16,21-29,32,35,38,41,43,51-53,56,58,59 and 63-67.

### **DETAILED ACTION**

1. Claims 1, 2, 5, 6, 8, 11-13, 17-20, 30, 33, 36, 37, 42, 45-50, 54, 55, 57, 60, 61 are presented for examination. Claims 4, 9, 10, 14-16, 21-29, 32, 35, 38, 41, 43, 51-53, 56, 58, 59, 63-67, are withdrawn. Claims 1, 2, 5, 8, 11-13, 20, 30, 33, 37, 42, 45-50, 55, 57, have been amended. Claims 3, 7, 31, 34, 39-40, 44, 62, 68-84 have been cancelled.

### ***Election/Restrictions***

2. Applicant's election with traverse of Group I, Species A in the reply filed on November 25th 2005 is acknowledged. The traversal is on the ground(s) that the subject matter presently claimed already has been examined substantively by the examiner. This is not found persuasive because the amendment filed August 11<sup>th</sup> 2005 completely changed the scope of the claims and/or added new claim limitations.

The requirement is still deemed proper and is therefore made FINAL.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, a lighting program defining a sequence of states for the plurality of lights and a lighting program transferred in a data format having a plurality of frames, each one of the plurality of frames corresponding to one state in the sequence of states for the plurality of lights, and the lighting program being stored by storing a specific frame for each of the states, the data format representing a final data stream capable of directly controlling the plurality of lights; a lighting program being encoded in a data format that represents a final data stream capable of directly controlling the plurality of lights; a lighting program is a first lighting program, and wherein the computer readable medium is further

encoded with a second lighting program that, when executed, controls the plurality of lights; a lighting program includes data to control at least one non-light device in addition to the plurality of lights, a non-light controlled device; a new effect; changing an effect to a new effect; changing speed; a “display-less” device; act (B) is performed before the act (A) and the acts of all those elements above required by the claim language must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The examiner has provided a number of examples of the drawing deficiencies above, however, the list of deficiencies may not be all inclusive. Applicant should refer to these as examples of deficiencies and should make all the necessary corrections to eliminate the drawing objections.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 2, 5, 6, 8, 11-13, 17-20, 37, 42, 45-50, 54, 55, 57, 60, 61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the final data stream represented by the plurality of frames" in lines 14-15. There is insufficient antecedent basis for this limitation in the claim.

Claim 37 recites the limitation "the final data stream represented by the plurality of frames" in lines 10-11. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1, 2, 5, 6, 8, 11-13, 17-20, 30, 33, 36, 37, 42, 45-50, 54, 55, are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,466,234 to Pyle (Supplied by applicant).

Referring to claims 1, 30, 37, Pyle teaches a method, system, apparatus, computer readable medium for executing a lighting program to control a plurality of lights, the lighting program defining a sequence of states for the plurality of lights (Whole Document), comprising: transferring the lighting program from a device on which the lighting program was created to a computer readable medium and storing the lighting program on the computer readable medium, the lighting program being transferred in a data format having a plurality of frames (See Fig. 6, Col. 5, lines 46 – Col. 6, lines 39), each one of the plurality of frames corresponding to a state in

Art Unit: 2125

the sequence of states for the plurality of lights, and the lighting program being stored by storing a specific frame for each of the states, the data format representing a final data stream capable of directly controlling the plurality of lights (Col. 4, lines 10-29); coupling the computer readable medium to a device; coupling the device to the plurality of lights (See Fig. 6, Col. 5, lines 46 – Col. 6, lines 39); and executing the lighting program on the device by reading the plurality of frames from the computer readable medium and passing the final data stream represented by the plurality of frames to the plurality of lights to control the plurality of lights to execute the sequence (Col. 4, lines 10-29).

Referring to claims 2, 5, 6, 8, 11-13, 17-20, 42, 45-50, 54, 55, Pyle teaches a computer readable medium encoded with a lighting program that, when executed, controls a plurality of lights and defines a plurality of states for the plurality of lights, the lighting program being encoded in a data format that represents a final data stream capable of directly controlling the plurality of lights, transferring the programs via a communications channel between various computers and mediums and switching scenes and transition times and effects (Col. 5, lines 14-45). Referring to claim 33, Pyle teaches the computer readable medium of claim 30, wherein the lighting program is a first lighting program, and wherein the computer readable medium is further encoded with a second lighting program that, when executed, controls the plurality of lights (Col. 5, lines 46- Col. 6, line 38). Referring to claim 36, Pyle teaches the computer readable medium of claim 30, wherein the lighting program includes data to control at least one non-light device in addition to the plurality of lights (Col. 1, lines 40-41).

Art Unit: 2125

7. Claims 1, 2, 5, 6, 8, 11-13, 17-20, 30, 33, 36, 37, 42, 45-50, 54, 55, rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 5,945,993 to Fleischmann (Supplied by applicant).

Referring to claims 1, 30, 37, Fleischmann teaches a method, system, apparatus, computer readable medium for executing a lighting program to control a plurality of lights, the lighting program defining a sequence of states for the plurality of lights (Whole Document), comprising: transferring the lighting program from a device on which the lighting program was created to a computer readable medium and storing the lighting program on the computer readable medium, the lighting program being transferred in a data format having a plurality of frames (Col. 3, lines 7-50), each one of the plurality of frames corresponding to a state in the sequence of states for the plurality of lights, and the lighting program being stored by storing a specific frame for each of the states, the data format representing a final data stream capable of directly controlling the plurality of lights (Fig. 2, elements 66, 68a-68d; Col. 4, lines 33-52; Col. 5, lines 24-30); coupling the computer readable medium to a device; coupling the device to the plurality of lights (See Fig. 1; Col. 2, line 61 – Col. 3, line 6); and executing the lighting program on the device by reading the plurality of frames from the computer readable medium and passing the final data stream represented by the plurality of frames to the plurality of lights to control the plurality of lights to execute the sequence (Fig. 2, elements 66, 68a-68d; Col. 4, lines 33-52; Col. 5, lines 24-30).

Referring to claims 2, 5, 6, 8, 11-13, 17-20, 42, 45-50, 54, 55, Fleischmann teaches a computer readable medium encoded with a lighting program that, when executed, controls a plurality of lights and defines a plurality of states for the plurality of lights, the lighting program



Art Unit: 2125

being encoded in a data format that represents a final data stream capable of directly controlling the plurality of lights (Fig. 2, elements 66, 68a-68d; Col. 4, lines 33-52; Col. 5, lines 24-30), transferring the programs via a communications channel between various computers and mediums and switching lighting (Col. 2, lines 50-60). Referring to claim 33, Fleischmann teaches the computer readable medium of claim 30, wherein the lighting program is a first lighting program, and wherein the computer readable medium is further encoded with a second lighting program that, when executed, controls the plurality of lights (Col. 4, lines 53-67; Fig. 2). Referring to claim 36, Fleischmann teaches the computer readable medium of claim 30, wherein the lighting program includes data to control at least one non-light device in addition to the plurality of lights (Col. 11, lines 18-23).

8. Claims 30, 33, 36 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,769,527 to Taylor (supplied by applicant).

Referring to claims 30, 33, 36, Taylor teaches a computer readable medium encoded with a lighting program (Whole Document) that, when executed, controls a plurality of lights and defines a sequence of states for the plurality of lights, the lighting program being encoded in a data format that represents a final data stream capable of directly controlling the plurality of lights, the data format having a plurality of frames, each one of the plurality of frames corresponding to a state in the sequence of states for the plurality of lights, the lighting program being stored by storing a specific frame for each of the states, the data format representing a final data stream capable of directly controlling the plurality of lights to execute the sequence (Col. 48, lines 25-36); wherein the lighting program is encoded in a data format having an entry in the

Art Unit: 2125

lighting program corresponding to every one of the plurality of states for the plurality of lights; wherein the lighting program is encoded in a data format; wherein the medium is further encoded with another lighting program that, when executed, controls the plurality of lights; wherein the second lighting program is encoded in a data format that represents a second final data stream capable of directly controlling the plurality of lights (Col. 49, lines 9-21); wherein the lighting program includes data to control at least one non-light device in addition to the plurality of lights (Col. 50, lines 54-64).

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claim 57, 60, 61, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No 5,945,993 to Fleischmann or U.S. Pat. No. 6,466,234 to Pyle as applied to the claims above, and further in view of U.S. Pat. No. 5,769,527 to Taylor.

Referring to claims 57, 60, 61, Fleishmann and Pyle teaches all of the limitation disclosed above, however, fails to teach the second device is coupled to a cue table that identifies various actions to be taken during execution of the lighting program in response to at least two inputs received at the cue table.

However, referring to claims 57, 60, 61, Taylor teaches analogous art, wherein the second device is coupled to a cue table that identifies various actions to be taken during execution of the lighting program in response to at least two inputs received at the cue table (Col. 5, lines 36 – Col. 6, line 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Fleischmann or Pyle with the teachings of Taylor. One of ordinary skill in the art would have been motivated to combine these references because Taylor teaches lighting systems having intelligent remote lighting fixtures and intelligent distribution networks (Col. 1, lines 26-30) that can coordinate communications between control devices and lamp units having diverse communications protocols, functions, and data formats (Col. 2, lines 5-24).

### *Response to Arguments*

10. Applicant's arguments filed August 11<sup>th</sup> 2005 have been fully considered but they are not persuasive.

Regarding the drawings, the examiner respectfully invites applicant's attention to 37

C.F.R 1.83(a) which clearly states:

“(a) The drawing in a nonprovisional application must show every feature of the invention specified in the claims. However, conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the drawing in the form of a graphical drawing symbol or a labeled representation (e.g., a labeled rectangular box).”

The objections to the drawings are maintained because the examiner believes that the drawings, as such, do not show every feature of the invention specified in the claims. Applicant argument that the features are taught in the specification is not found persuasive because the drawings must show every feature of the invention specified in the claims. Applicant argues that acts (A) and (B) are illustrated by arrows and that the arrows do not restrict the order of acts. This argument is not found persuasive because the drawings must show every feature of the

invention specified in the claims. Furthermore, the instant specification does not teach that the arrows do not restrict the order of acts.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a controller that executes the lighting program for each state in the sequence) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that Pyle fails to teach a lighting program defining a sequence of states for the plurality of lights. The examiner respectfully disagrees. The instant specification teaches the term "sequence" refers to two or more lighting effects spaced in time. The instant specification teaches an effect may contain one or more states, so that the effect can retain information over the course of time. Pyle clearly teaches "each scene also has an associated change time that indicates the time that it will take to transition the lights from their current state to their target state" (Col. 5, lines 7-10). The examiner submits that each scene that has an associated change time that indicates the time that it will take to transition the lights from their current state to their target state is a lighting program defining a sequence of states for the plurality of lights.

Applicant argues that Fleischmann fails to teach a lighting program defining a sequence of states for the plurality of lights. The examiner respectfully disagrees. The instant specification teaches the term "sequence" refers to two or more lighting effects spaced in time. The instant specification teaches an effect may contain one or more states, so that the effect can

retain information over the course of time. Fleischmann clearly teaches the computer schedules the times at which the lighting loads are turned on or off (Col. 1, lines 10-20; Col. 9, lines 18-34). The examiner submits that computer that schedules the times at which the lighting loads are turned on or off is a lighting program defining a sequence of states for the plurality of lights.

Applicant argues that Taylor fails to teach a lighting program that defines a sequence of states in a data format that represents a final data stream capable of directly controlling the plurality of lights, the data format having a plurality of frames, wherein each frame corresponds to one state in the sequence and wherein encoding the computer includes storing a specific frame for each of the states that represents a final data stream capable of directly controlling the plurality of lights to execute the sequence. The examiner respectfully disagrees. The instant specification teaches formats that can be used for controlling a plurality of lighting units include data streams in data formats such as DMX, RS-485, RS-232. Taylor teaches RS232 data format (Col. 48, lines 25-44). The examiner submits that the RS232 data format that Taylor teaches is a lighting program that defines a sequence of states in a data format that represents a final data stream capable of directly controlling the plurality of lights, the data format having a plurality of frames, wherein each frame corresponds to one state in the sequence and wherein encoding the computer includes storing a specific frame for each of the states that represents a final data stream capable of directly controlling the plurality of lights to execute the sequence.

### *Conclusion*

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (571) 272-3754. The examiner can normally be reached on 9:30am-6:00pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/870,418

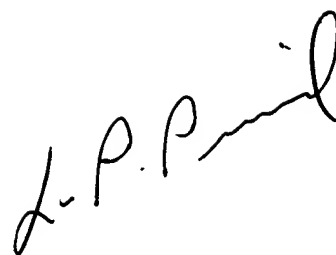
Art Unit: 2125

SPS

Sean P. Shechtman

February 20, 2006

Page 13

A handwritten signature in black ink, appearing to read "L. P. Picard", written diagonally across the page.

LEO PICARD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100